SZABADOS, Antal, dr.

"Food virology as a new field for the veterinarian-food hygienist" by G. Seidel. Reviewed by Antal Szabados. Magy allatorv lap 17 no.8: 319 Ag '62.

L 20[illegible]-66 EWT(l)/EPF(n)-2/EWP(t) IJP(c) JD/WW/JG

ACC NR: AP6009278 SOURCE CODE: HU/0014/66/000/003/0056/0061

AUTHOR: Szabados, B. (Graduate metallurgist)

ORG: none

TITLE: Determining the gas content of molten aluminum alloys

SOURCE: Kohaszati lapok, no. 3, 1966, 56-61

TOPIC TAGS: aluminum alloy, molten alloy, alloy gas content, gas content determination, alloy fluidity, alloy shrinkage, alloy castability

ABSTRACT: The possibility of determining the gas content of liquid aluminum alloys has been tested with Dardell-type equipment in three types of alloys: Al-Si12 (12.2% Si, 0.29% Fe, 0.26% Mn); Al-Si9 (8.4% Si, 0.47% Fe, 0.36% Mg, 0.36% Mn) and Al-Mg-Si (3.05% Si, 0.24% Fe, 0.56% Mg, 0.56% Mn). The gas content of the molten alloys was measured before and after treatment with a mixture of 85% NaCl and 15% Na_3AlF_6. The effect of the gas content on fluidity and shrinkage was evaluated. In Al-Si12 alloy at temperatures of 650 to 700C, the gas content before salt treatment was 0.247 $cm^3/100g$ and after the treatment, 0.244 $cm^3/100g$, still above the permissible limit. Its fluidity improved only by 6.5% after salt treatment. The high oxide and gas content in the alloy was responsible for a higher than normal shrinkage value, but did not impair the strength value. In Al-Si9-Mg alloy, the salt treatment increased the fluidity by 15.6%. The gas content in the Al-Mg-Si alloy before salt

Card 1/2

DK 669.785:669.715-404

L 20434-66
ACC NR: AP6009278

treatment was too high to measure with the equipment, the tensile strength was at the lower limit, and the ductility was adequate. The low strength values were attributed to a higher iron content. The test indicated that strength characteristics are influenced by oxides rather than by gas content. Orig. art. has: 9 figures and 7 tables. [KS]

SUB CODE: 11 / SUBM DATE: none/ ATD PRESS: 4222

Card 2/2 ULR

SZABADOS, C.; TARUS, V.

Reducing the operating costs in automotive transportation by modernizing the methods of maintenance. I. p. 425.

REVISTA TRANSPORTURILOR. (Asociatia Stiinfica a Inginerilor si Tehnicienilor din Rominia si Ministerul Transporturilor Rutier, Navale si Aeriene) Bucuresti, Romania. Vol. 6, no. 10, Oct. 1959

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Jan 1960

Uncl.

OZARADOS, C.; TARUS, V.

Reducing operation costs in automotive transportation by modernizing the methods of maintenance. II. p. 467.

REVISTA TRANSPORTURILOR. (Asociatia Stiintifica a Inginerilor si Technicienilor din Romina si Ministerul Transporturilor Rutiere, Navale si Aeriene) Bucuresti, Rumania. Vol. 6, no. 11, Nov. 1959.

Monthly list of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960

Uncl.

SZABADOS, C.

"Technological bases of autovehicle repairing" by R. Keller. Reviewed by C. Szabados. Rev transport 8 no. 9:422-424 S '61.

SZMUK, Imre, dr.; BACH, Imre, dr.; DANZIGER, Laszlo, dr.; FEKETE, Balazs, dr.; FLEISCHMANN, Laszlo, dr.; JAKO, Geza, dr.; MISSURA, Tibor, dr.; POPPER, Ssuzsanna, dr.; SZABADOS, Daisy, dr.

Use of radioiodine in localization of inflamed regions (foci, abscesses). Orv. hetil. 97 no.34:949-951 19 Aug 56.

1. A Fovarosi Peterfy Sandor u. Korhazrendelo (igazgato: Lendvai, Jozsef, dr.) kozlemenye.

(BRAIN, abscess
exper., localization with radioiodine in dogs (Hun))
(IODINE, radioactive
in localization of exper. brain abscesses in dogs (Hun))

SZABADOS, D.

F-3

YUGOSLAVIA/Microbiology - Industrial Microbiology.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67176

Author : Sabados, D.
Inst : -
Title : Bioyogurt.

Orig Pub : Mljekarstvo, 1957, 7, No 7, 145-147.

Abstract : No abstract.

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L 1981-66

ACCESSION NR: AT5024289

centrations of DNP, a further decrease was observed in pyruvate utilization, oxygen consumption and citrate synthesis. Both the DNP inhibition of pyruvate utilization and citrate synthesis, and its activation of acetoacetate production were diminished by small amounts of fumarate. In the presence of both substrates, DNP enhanced the oxygen consumption. Thus, in addition to its inhibiting effect on pyruvate utilization, DNP increases its conversion to acetoacetate and at the same time, especially in the presence of fumarate, renders the oxidation of acetyl-CoA (formed from pyruvate) more complete in the citric acid cycle. This means that DNP shows a ketogenic effect with respect to the pyruvate metabolism of liver mitochondria. The probable mechanism of this effect is discussed. "We are indebted to Prof. V. Szekessy-Hermann for her interest throughout this study." Orig.art. has: 1 figure, 3 tables.

ASSOCIATION: Institute of Biochemistry, University Medical School, Budapest

SUBMITTED: 00 ENCL: 00 SUB CODE: LS, OC

NR REF SOV: 000 OTHER: 0011 JPRS

Card 2/2 DP

PETER, Ferenc, dr. (Budapest VIII., Rakoczi ut 27/b); RUSZNAK, Istvan, dr. (Budapest III. Korvin O.u.44); PALYI, Gyula (Budapest XII, Meredek u.43); SZABADOS, Ida (Budapest XI., Moricz Zsigmond korter 14)

Investigation of adsorption waves. I. Investigation of the reduction of anthraquinone-1-sulphonic acid at the dropping mercury electrode. Acta chimica Hung 24 no.4:363-370 '60. (EEAI 10:4)

1. Department for Applied Chemistry, Technical University, Budapest.
(Adsorption) (Anthraquinonesulfonic acid)
(Electrodes, Dropping mercury) (Riboflavine)
(Methylene blue) (Polarograph and polarography)
(Diffusion) (Phenazinol)

PETER, Ferenc; RUSZNAK, Istvan; PALYI, Gyula; SZABADOS, Ida

Investigation of adsorption waves. I. Examination of anthraquinone-1-sulfonic-acid reduction on mercury-dropping electrodes. Magy kem folyoir 66 no.5:178-181 My '60.

1. Budapesti Muszaki Egyetem Gyakorlati Kemiai Tanszeke.

PETER, Ferenc; PALYI, Gyula; SZABADOS, Ida

Investigation of adsorption waves.II.Investigation of anthraquinone-1-5-disulphonic acid reduction on dropping mercury electrodes. Magy kem folyoir 67 no.10:428-431 O '61.

1. Textilipari Kutato Intezet (for Peter) 2. Egyesult Vegyimuvek (for Palyi) 3. Orszagos Kozegeszsegugyi Intezet (for Szabados).

PETER, Ferenc; SZABADOS, Ida; PALYI, Gyula

Investigation of adsorption phenomena occurring on dropping mercury electrode.I.Effect of leuco-anthraquinone sulfurinc acid-ester derivatives on their reduction occurring in the nitro-benzol-3-sulfonic acid agent. Magy kem folyoir 68 no.3: 101-105 Mr '62.

1. Textilipari Kutato Intezet, Budapest (for Peter) 2. Orszagos Kozegeszsegugyi Intezet, Budapest (for Szabados) 3. Egyesult Vegyimuvek, Budapest(for Palyi)

PETER, Ferenc; SZABADOS, Ida

Examination of nitrobenzene-3-sulfonic acid reduction on dropping mercury electrodes. Magy kem folyoir 68 no.4:145-149 Ap '62

1. Textilipari Kutato Intezet, Budapest (for Peter).
2. Orszagos Kozegeszsegugyi Intezet, Budapest(for Szabados).

PETER, Ferenc; PALYI, Gyula; SZABADOS, Ida

Investigation of adsorption waves.III.Reduction of anthraquinone-1,8-disulfonic acid on dropping mercury electrodes. Magy kem folyoir 68 no.6:234-236 Je '62.

1. Textilipari Kutato Intezet, Budapest (for Peter).
2. Egyesult Vegyimuvek, Budapest (for Palyi).
3. Orszagos Kozegeszsegugyi Intezet, Budapest (for Szabados).

SZABADOS, J.

POZSONYI, J.; SZABADOS, J.

Renal tuberculosis in children. Orv. hetil. 94 no.42:1149-1152 18 Oct 1953. (CLML 25:5)

1. Doctors. 2. Osteology Department of Szabadsaghegy State Children's Sanatorium (Director - Head Physician -- Dr. Istvan Flesch) and Urology Department of the National Physical Training and Sports Hygiene Institute (Director - Head Physician -- Dr. Sandor Balassa).

SZABADOS, Jeno, dr.

New data on antituberculotic therapy of renal tuberculosis. Magy. sebeszet 9 no.3:191-197 June 56.

1. Az Orszagos Testneveles es Sportegeszsegugyi Intezet (igazgato: Dr. Kovari Aladar es Fodor Jozsef Tbc. Gyogyintezet (Igazgato: Dr. Risko, Tibor) urologiai osztalyainak kozlemenye.
(TUBERCULOSIS, RENAL, ther.
conservative ther., indic. & compl. (Hun))

SORU, Eugenia; SZABADOS, Judith; TANASESCO, D.; PARASCHIVESCO, Maria

Oxidative phosphorylation in Mycobacterium tuberculosis BCG and its variants resistant to streptomycin, PAS and isoniazid. Arch. roum. path. exp. microbiol. 21 no.1:59-68 Mr '62.

1. Travail de l'Institut "Dr. I. Cantacuzino" --Services de Biochemie et d'Immunochimie et du Vaccin B.C.G.
(MYCOBACTERIUM BOVIS) (DRUG RESISTANCE, MICROBIAL)
(ANTITUBERCULAR AGENTS) (ENERGY METABOLISM)

SZABADOS, Judith; TOPCIU, Aurica [deceased]

Research on directed resistance in Neisseria meningitidis. Pt.5. Arch. Roum. path. exp. microbiol. 23 no.4:973-976 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Service de Biochimie Generale (for Szabados), Service des Cocci Pathogenes (for Topciu).

Szabados, Karolyne

HUNGARY/ Analytical Chemistry - Analysis of Inorganic Substances G-2

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12067

Author : Bozsai Imre, Szabados Karolyne
Title : Determination of Lead Content in Lead Alloys

Orig Pub : Kohasz. lapok, 1955, 10, No 9, 423-424

Abstract : The known methods for determining Pb in alloys have been checked. The most extensively utilixed molybdate method shows considerable discrepancies in the results; complete precipitation of $PbMoO_4$ takes place only at pH 8. Accuracy of Pb determination depends upon conditions of precipitation of PbS; at pH 2 no precipitation of PbS takes place, 2.5 it is contaminated by iron. Optimal pH value of the medium is 2-2.5. On the basis of this verification an accurate method has been developped for the determination of Pb. Prior to treatment with hydrogen

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Card 2/2

SZATMÁRY, L.

An informative summary of the material of the Second Internation Conference on the Peaceful Uses of Atomic Energy. p.25

ENERGIA ES ATOMTECHNIKA. (Energiagazdalkodasi Tudomanyos Egyesulet)
Budapest, Hungary
Vol. 12, no.1, Jan. 1959

Monthly List of East European Accessions (EEAI) LC., Vol. 8, no.7, July 1959
Uncl.

SZABADOS, Laszlo, okleveles gepeszmernok

Nuclear reactor systems. Ipari energia 1 no.1/4:93-94 J1-O '60.

1. Kozponti Fizikai Kutato Intezet.

83323
H/008/60/000/009/002/002
B009/B057

11.3000

AUTHORS: Szentgyörgyi, István, Török, Antal, Szabados, László

TITLE: Examination of Heat Transfer of Suspensions

PERIODICAL: Energia és Atomtechnika, 1960, No. 9, pp. 388-395

TEXT: Some organic compounds or their mixtures (diphyl, diphenyl, terphenyl, etc.) exhibit properties that qualify them for use as reactor coolants. Their heat-transfer capacity, however, is considerably lower than that of the conventional coolant, water. To improve the heat-transfer coefficient of these liquids, the authors suspended in them solids of high heat-transfer capacity and attained an improvement of 70% by an addition of 30 per cent by weight. The heat-transfer coefficient was calculated from Nusselt's empirical function. Heat transfer, however, also depends on viscosity. Since the viscosity of the suspension increases with respect to that of the pure liquid, the effect of the higher heat-transfer coefficient is balanced, and above a certain concentration the heat transfer of the suspension even decreases. In the graphite-diphyl test suspension this heat transfer maximum appeared at 90°C and with a graphite addition

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Examination of Heat Transfer of Suspensions E/008/60/000/009/002/002
B009/B057

of about 23 wt%. The relative viscosity versus concentration is plotted in Fig. 2 according to both Hatschek's and Orr's and Dalla Valle's formulas (Refs. 6 and 11, respectively). The experimental setup was essentially a single-tube heat exchanger. American researchers made similar experiments on graphite and aluminum suspensions (Ref. 11). For the evaluation of the test results, constants suggested by Bayer-Leverkusen, for the same mixture of diphenyl-oxide and diphenyl were substituted in the formula of the heat-transfer coefficient. The use of suspensions as reactor coolants is associated with the following disadvantages: higher power consumption of the circulating pump, higher wear and tear of pumps, metal parts, etc. The use of suspensions as reactor coolants would not be advisable even if the heat transfer could be multiplied thereby. There are 10 figures, 2 tables, and 14 references: 3 Soviet, 2 US, 1 German, 1 French, and 3 Hungarian.

ASSOCIATION: Központi Fizikai Kutató Intézet
(Central Research Institute of Physics)

Card 2/2

SZENTGYORGYI, Istvan; TOROK, Antal; SZABADOS, Laszlo

Investigations of the heat transfer properties of suspensions. Koz fiz kozl MTA 8 no.2/3:115-129 '60. (EEAI 10:4)

1. A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezete, Reaktorfizikai es Technikai Laboratorium
(Suspensions) (Nuclear reactors)
(Biphenyl) (Terphenyl)

S/262/62/000/007/001/016
I007/I207

AUTHOR: Németh, Géza, Raszl, Károly, Szabados László, Szeghő, Laszló and Torok, Antal

TITLE: Stable temperature distribution (in case of convective heat transfer) in a cylinderical fuel cell of the active zone of a heterogeneous nuclear reactor

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 7, 1962, 4, abstract 42.7.13. "Magyar tud. akad. Közp. fiz. kutatö int. közl.", v. 9, no. 1–2, 1961, 3–23, III, IX [Abstracter's note: Original language Hungarian].

TEXT: A solution is presented of the differential equation for convective heat transfer in finite and infinite fuel elements. For exact solutions the coolant temperature can not be reproduced without knowing the temperature distribution in each fuel element. For the solution of the given equation the temperature distribution along the fuel element is assumed to be unknown. A comparison is given between exact and approximate solutions. There are 9 figures and 13 references.

[Abstracter's note: Complete translation.]

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Magyar Tudomanyos Akademia, Kozponti Fizikai Kutato Intezete, Reaktorfiz. es Tech. Lab.

32721
H/008/62/000/001/002/002
B122/B102

26.2231

AUTHORS: Németh, G., Raszl, K., Szabados, L., Szeghő, L., Török, A.

TITLE: Steady-state heat distribution in a cylindrical-symmetric unit cell of the active zone of heterogeneous reactors in the case of convective heat transfer

PERIODICAL: Energia és Atomtechnika, 15 no. 1, 1962, 41 - 46

TEXT: Part II. Determination of A_n coefficients. In Part I it was found that the solution of differential equation $T(r,z)$ was given by the sum of Laplace's equation (in the form of an infinite series) and of Poisson's equation (in closed form): $T(r,z) = T_0(r,z) + T_1(r,z)$ (51). In the solution of this differential equation the unknown coefficients $A_n (n = 0,1,2,3...)$ arise. A practicable way of calculating these coefficients is the application of equation systems with an infinite number of unknowns. (Reference is made here and in the following to L. V. Kantorovich and V. I. Krylov: Approximate methods of higher analysis (Hungarian edition, Budapest, 1955)). By this method the following two

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Steady-state heat distribution...

equations are found to yield the system of equations with an infinite number of unknowns for the determination of the A_n:

$$A_o = B_o - \sum_{n=1}^{\infty} A_n \frac{r_n}{\overline{IB}_n} \left[1 - (-1)^n\right] \quad (n = 1,2,3,\ldots) \quad (73) \text{ and}$$

$$A_k = \frac{B_k}{p_k} - \frac{1}{p_k} \sum_{n=1}^{\infty} A_n \frac{2r_n\beta_n}{1(\beta_n^2 - \beta_k^2)} \left[1 - (-1)^{n+k}\right] \quad (74) \quad (n = 1,2,\ldots(k-1),(k+1),..)$$

Coefficients B_o and B_k are computable Fourier coefficients of $f(z)$. By substitution of $A_k p_k = X_k$ into equation (74), this equation is transformed to a system of entirely regular equations having (according to a thesis of Kantorovich-Krylov) but one solution which can be determined by the method of successive approximations. $B_k = O(1/k^2)$; from a thesis of the above Soviet authors it follows that $X_k = O(1/k^2)$, for the unique solution of the entirely regular equation system tends toward zero with

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Steady-state heat distribution...

$k \to \infty$. In zeroth approximation $A_k^{(o)} = 0$, in first $A_k^{(1)} = B_k/p_k$. Coefficients A_k and B_k have been computed with data given in Part I and are plotted as functions of k. In the following the differential equation of heat transfer for an infinitely long fuel element ($\partial T^2/\partial z^2 = 0$) is solved. Against the correct solution of the differential equation of temperature distribution in the fuel element $T(r,z)$ and of the longitudinal temperature distribution $t(z)$ in the coolant developed in Part I, axial heat transfer (in direction z) is neglected here. For this case, $\partial^2 T^*/\partial z^2 = 0$. This neglection considered, the corresponding approximate solutions $T^*(r,z)$ and $t^*(z)$ are obtained. Correct and approximate solutions are compared in the following. From graphs for the temperature distribution in three given cross sections of the fuel element and those for the longitudinal temperature distribution in the coolant, it is evident that differences between results of accurate and approximate calculations amount to a few % for the former, and only some hundredths of % for the latter. The error resulting from the neglect of axial heat transfer increases with the cross section of the fuel element

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Steady-state heat distribution...

and with its thermal conductivity, and decreases with its length. If the slenderness ratio of the fuel element $2Ro/l > 0.05$, and the thermal conductivity of its material $\lambda > 10$ kcal/m, the more elaborate method is commendable, especially if the heat-flux density on the mantle is high. Differential equations have been solved for bare fuel elements only. There are 9 figures and 13 references: 12 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Központi Fizikai Kutató Intézet (Central Research Institute of Physics)

Card 4/4

SZABADOS, Laszlo, tudomanyos munkatars

Application of radioactive isotopes. Ipari energia 4 no. 6: 136-138 Je '63.

SZABADOS, Laszlo

Nuclear engineering news. Ipari energia 4 no. 7: 167-168 Jl '63.

1. "Ipari Energiagazdalkodas" szerkeszto bizottsagi tagja.

SZABADOS, Laszlo

Nuclear engineering news. Ipari energia 5 no.2:33 F '64.

1. Editorial board member, "Ipari Energiagazdalkodas."

SZABADOS, M.

Alga vegetation in the primordial moor a[illegible] Kiskunhalas. p. 451, Vol 2, 1952. (published in 1954) A MAGYAR TUDOMÁNY EGYETEMEK BIOLÓGIAI INTÉZETEINEK ÉVKÖNYVE. SZEGEDI RÉSZ. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

SZABADOS, ..

SZABADOS, ... Fauna and flora of some temporary stagnant pools in a meadow of the Borzsony Mountains in Upper Hungary. II. Algae. In German. ... 241.

Vol. 5, No. 3/4, 1954
ACTA BIOLOGICA.
SCIENCE
Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

SZABÓ, K.

"Life in the Tisza. II. Contributions to material on algae in the upper course of the Tisza." In German. p. 189.

ACTA UNIVERSITATIS SZEGEDIENSIS. PARS BIOLOGICA SCIENTIARUM NATURALIUM. ACTA BIOLOGICA. Szeged, Hungary, Vol. 3, No. 3/4, 1957.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

SZABADOS, Pal, dr.

Development of planning methods for productivity in the construction industry. Munka szemle 6 no.10:13-18 O '62.

SZABADOS, Pal, dr.

Manpower turnover in the construction industry and its effect on the formation of productivity. Epites szemle 6 no.10:317-322 '62.

1. Epitesgazdasagi es Szervezesi Intezet tudomanyos csoportvezetoje.

SZABADOS, Peter

Ferenc Rozsa, 1906-1942. Elet tud 16 no.5:131-134 29 Ja '61.

ABOSSY, Istvan, dr.; DOBOS, Laszlo, dr.; SZABADOS, Sandor, labor. asszisztens

Clinical observations and early therapeutic results in prednisolone treatment. Tuberkulozis 16 no.6:183-186 Je '63.

1. A satoraljaujhelyi Varosi Tbc Korhaz (igazgato: Abossy Istvan dr.) kozlemenye.
(TUBERCULOSIS, PULMONARY) (PREDNISOLONE)
(CORTICOTROPIN) (SURGERY, OPERATIVE)
(ANTITUBERCULAR AGENTS)

L 10336-66 EWT(1)/EWA(1)/EWA(b)-2 RO/JK

ACC NR: AP6003344 SOURCE CODE: HU/0018/65/017/002/0153/0159

AUTHOR: Szabados, Terez--Sabadosh, T.; Boszormenyi, Jozsef--Besermeni, Y; Dobias, Gyorgy--Dobiash, D.; Rojti, Mihaly--Royti, M.; P. Juhasz, Vera--P. Yukhas, V.

ORG: HUMAN Institute of Vaccine Production and Research, Budapest (HUMAN Oltoanyagtermelo es Kutato Intezet); PHYLAXIA State Institute of Vaccine Production, Budapest (PHYLAXIA Allami Oltoanyagtermelo Intezet)

TITLE: Changes in the antitoxin titer of animals used for serum production in the course of iodocasein feeding

SOURCE: Kiserletes Orvostudomany, v. 17, no. 2, 1965, 153-159

TOPIC TAGS: experiment animal, biochemistry, veterinary medicine, animal physiology, immunization, immunology

ABSTRACT: The changes in the antitoxin titer were studied in animals the metabolism of which has been increased by iodocasein feeding. Among horses immunized with diphtheria and tetanus toxin and sheep immunized with staphylotoxin, the antitoxin level of the groups fed on iodocasein was significantly higher than that of the controls. No noticeable difference was observed in cattle immunized with tetanus toxin. Orig. art. has: 1 figure and 5 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 16Apr64 / ORIG REF: 003 / OTH REF: 002

Card 1/1

SZABO, L.; SZABADOS, Therese; ECK, Erna H., unter technischer Assistenz von BERNATSKY, M.

Glutamic acid oxalacetic acid transaminase determinations in infancy and childhood. I. Studies in relation to hydrocephalus. Acta Paediat Acad Sci Hung 1 no.3:199-209 '60.

1. Kinderklinik der Medizinischen Universitat, Szeged.

(TRANSAMINASES blood) (HYDROCEPHALUS blood)

SZABO, L.; SZABADOS, Therese; ECK, Erna H., unter technischer Assistenz von BERNATSKY, M.

Glutamic-oxalacetic acid transaminase determinations in infancy and childhood. II. Studies on premature and newborn infants. Acta Paediat Acad Sci Hung 1 no.3:211-221 '60.

1. Kinderklinik der Medizinischen Universitat, Szeged.

(TRANSAMINASES blood) (INFANT NEWBORN blood)
(INFANT PREMATURE blood)

SZABO, Lajos, dr.; SZABADOS, Terez, dr.; ECK, Erna, H. (technikai munkatars: BERNATSKY, Margit)

Glutamic acid-oxalacetic acid transaminase determinations in infancy and childhood. Part II. Studies in connection with hydrocephalus. Orv.hetil. 101 no.3:87-91 Ja '60.

(HYDROCEPHALUS diag.) (TRANSAMINASES chem.)

DUX, Erno, dr.; GIMESY, Ferenc, dr.; SZABADOS, Terez, dr.

Severe hemorrhagic diathesis after repeated exsanguination-transfusion. Orv.hetil.101 no.33:1170-1174 14 Ag '60.

1. Szegedi Orvostudomanyi Egyetem, Gyermekklinika
(BLOOD GROUPS)
(BLOOD TRANSFUSION compl)
(HEMORRHAGIC DIATHESIS)

KOLTAY, Miklos, dr.; SZABADOS, Terez, dr.

Immunoelectrophoresis. Orv.hetil. 101 no.37:1297-1303.11 S '60.

1. Szegedi Orvostudomanyi Egyetem, Gyermekklinika.
(ELECTROPHORESIS)

SZABADOS, Terez; BOSZORMENYI, J.; DOBIAS, G.; ROJTI, M.; JUHASZ, Vera P.

Effect of iodocasein feeding on the antitoxin titre of animals used in serum production. Acta microbiol. acad. sci. Hung. 10 no.4:387-396 '63-'64

1. Serum and Vaccine Institute "Human" (Director: G. Veres), Budapest, and Serum and Vaccine Institute "Phylaxia" (Director J.Molnar), Budapest.

SZABADOS MOLNAR, Arpad

Useful technique. Radiotechnika 11 no.11:345 N '61.

STANKOVIANSKY, Samo, prof., inz.; RUSINA, Rudolf, inz., C.Sc.; SZABADOSOVA, Katarina, promovana chemicka

Polarographic examination of isothiocyanates nonsoluble in water (I). α-naphtylisothiocyanates and β-naphtylisothiocyanates. Chem. zvesti 16 no.8:625-632 Ag '62.

1. Katedra analytickej chemie, Prirodovedecka fakulta University Komenskeho, Bratislava, Smeralova 2.

RUSINA, R. [deceased]; STANKOVIANSKY, Samo, prof., inz.; SZABADOSOVA, Katarina, promovana chemicka

Polarographic examination of isothiocyanates nonsoluble in water. Pt. 2. Chem zvesti 17 no.5:300-306 '63.

1. Katedra analytickej chemie, Prirodovedecka fakulta University Komenskeho, Bratislava, Smeralova 2.

SABADVARI, Ferents [Szabadvary, Ferenc]

History of sugar. Nauka i zhizn' 29 no.10:90-91 O '62. (MIRA 15:12)
(Sugar)

SZABADVARY, Ferenc

History of aluminum. Elet tud 16 no.29:899-902 16 Jl '61.

SZABADVARY, Ferenc

Derivatograph: a new Hungarian invention. Elet tud 18 no.29: 920-922 21 Jl '63.

SZABADVARY, F.

HUNG.

Ascorbometric determination of oxygen dissolved in water. L. Erdey and F. Szabadváry (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 4, 325-32(1954)(in German)(English summary); cf. preceding abstr.—To det. dissolved O_2 in H_2O, treat the sample with NaOH soln. and a soln. of $Fe(NH_4)_2(SO_4)_2$ that has previously been passed through a Cd reductor to remove traces of Fe^{+++}. Dissolve the ppt., contg. Fe^{+++} in acid, and titrate the Fe^{+++} with 0.01 *N* ascorbic acid, with 4-amino-4'-methoxydiphenylamine indicator. NO_3^- interferes with the detn.

A. L. Underwood

SZABADVARY F.

8. **Determination of oxygen dissolved in water by means of ascorbic acid** -- *Vízben oldott oxigén meghatározása aszkorbinsavval* -- L. Szabó and F. Szabadváry

(Journal of Hydrology - *Hidrológiai Közlöny*, Budapest) Vol 34, 1954 No 1-2 pp 8-14, 2 figs, 2 tabs)

Oxygen dissolved in water was determined by filling a flask of known volume with the water to be tested. By means of a long pipette thin layers of an iron(III) free iron(II) ammonium sulfate solution and a sodium hydroxide solution were measured at the bottom of the flask. The iron(II) solution was made iron(III) free by passing it through a Cd-reductor pipette or by shaking with iron powder. Iron(III) formed by the action of the dissolved oxygen -- after shaking, settling and acidification -- was titrated with an 0.01 n ascorbic acid measuring solution in the presence of 4-amino-4'-methoxy-diphenylamine as an indicator. Winkler's method of oxygen determination may also be modified by adding iron(II) ammonium sulfate instead of potassium iodide to the oxidized manganese solution, and by titration with ascorbic acid

SZABADVARY, F.

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4-amino-4'-methoxy-diphenylamine as a colorimetric reagent. I. Determination of iron(III) ions — I. Prdey, F Szabadváry. (*Magyar Kémiai Folyóirat* — Vol. 60, 1954, pp. 311–316. 4 figs., 3 tabs.)

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The 4-amino-4'-methoxy-diphenylamine compound is transformed into a blue-coloured product in the presence of oxidizing ions. This colour reaction was employed for the determination of iron(III) ions. It was found that an inexpensive textile dyestuff, Variamin blue B, produced on an industrial scale was suitable as a reagent. The method proved to be useful for the determination of 0.2 to 12.0 μg/ml iron(III) in the pH range of 1 to 4. In the presence of other oxidizing ions yielding a blue colour reaction with the reagent, first the total extinction of the solution was measured and subsequently the measurement was repeated after the addition of sodium citrate. The difference between the two values obtained corresponded to the extinction of the iron(III) ions.

SZABADVARY, FERENC

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4-Amino-4'-methoxydiphenylamine as a colorimetric reagent. Determination of iron(III) ions. László Erdey and [illegible] Lech. Univ. Technol., Budapest, [illegible]. Mikrochem. Mikrochim. Acta 40, 131–42(1953) (in German with English summary); cf. C.A. 47, 5295f.—The blue color with absorption max. at 670 mμ, formed in the presence of oxidizing agents by 4-amino-4'-methoxydiphenylamine, available as Variamine Blue B Base, is suitable for the detn. of 0.02–12 p.p.m. of Fe(III) in the pH range 1–4 at temps. from 10 to 30°. Ions such as citrate, tartrate, $P_2O_7^{4-}$, $C_2O_4^{--}$, F^-, and PO_4^{3-} interfere by preventing color formation. There is no interference by Na^+, K^+, NH_4^+, Mg^{++}, Ca^{++}, Ba^{++}, Mn^{++}, Ni^{++}, Co^{++}, Al^{+++}, Cu^{++}, As^{+++}, Sb^{+++}, Cl^-, Br^-, I^-, SO_4^{--}, NO_3^-, or AsO_3^{3-}. Bi^{+++}, Sn^{++}, $Fe(CN)_6^{4-}$, and $Fe(CN)_6^{3-}$ must be absent, whereas certain amts. of Fe^{++}, Zn^{++}, Cd^{++}, Pb^{++}, CN^-, and BO_3^{3-} are permissible. In the presence of oxidizing agents the total oxidizing power is detd. and then the Fe is complexed with citrate and the amt. of Fe(III) detd. by difference. B. P. Block

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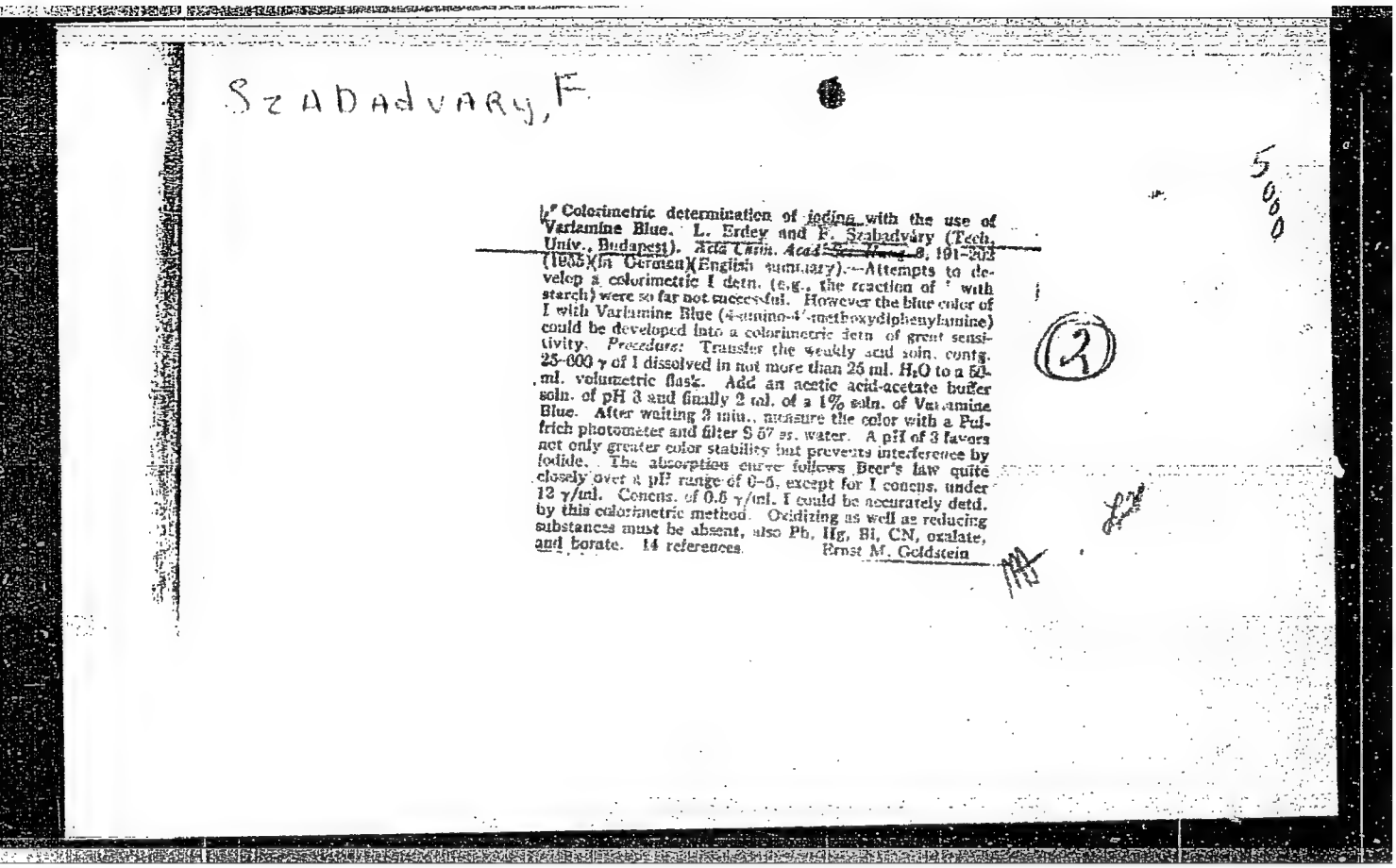

Szabadvary, F.

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(2)

Colorimetric determination of iodine with the use of Variamine Blue. L. Erdey and F. Szabadváry (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 8, 191–202 (1955)(In German)(English summary).—Attempts to develop a colorimetric I detn. (e.g., the reaction of ' with starch) were so far not successful. However the blue color of I with Variamine Blue (4-amino-4'-methoxydiphenylamine) could be developed into a colorimetric detn. of great sensitivity. *Procedure:* Transfer the weakly acid soln. contg. 25–600 γ of I dissolved in not more than 25 ml. H_2O to a 50-ml. volumetric flask. Add an acetic acid-acetate buffer soln. of pH 3 and finally 2 ml. of a 1% soln. of Variamine Blue. After waiting 3 min., measure the color with a Pulfrich photometer and filter S 57 vs. water. A pH of 3 favors not only greater color stability but prevents interference by iodide. The absorption curve follows Beer's law quite closely over a pH range of 0–5, except for I concns. under 12 γ/ml. Concns. of 0.6 γ/ml. I could be accurately detd. by this colorimetric method. Oxidizing as well as reducing substances must be absent, also Pb, Hg, Bi, CN, oxalate, and borate. 14 references. Ernst M. Goldstein

Szabadváry, Ferenc

13

/4285* Variamin Blue B as a Colorimetric Reagent. Variaminkék (4-amino-4'-metoxi difenilámin) mint kolorimetriás reagens. II. Determination of Iodine. Jódmeghatározás. (Hungarian.) László Erdey and Ferenc Szabadváry. *Magyar kémiai folyóirat*, v. 61, no. 11, Nov. 1955, p. 341-345.

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A color reaction suitable for the determination of iodine in solution of 0.5-13 μg.I per ml. between the pH range of 1-5. Sensitivity of method. Tables, graphs. 15 ref.

SZABADVARY, F.

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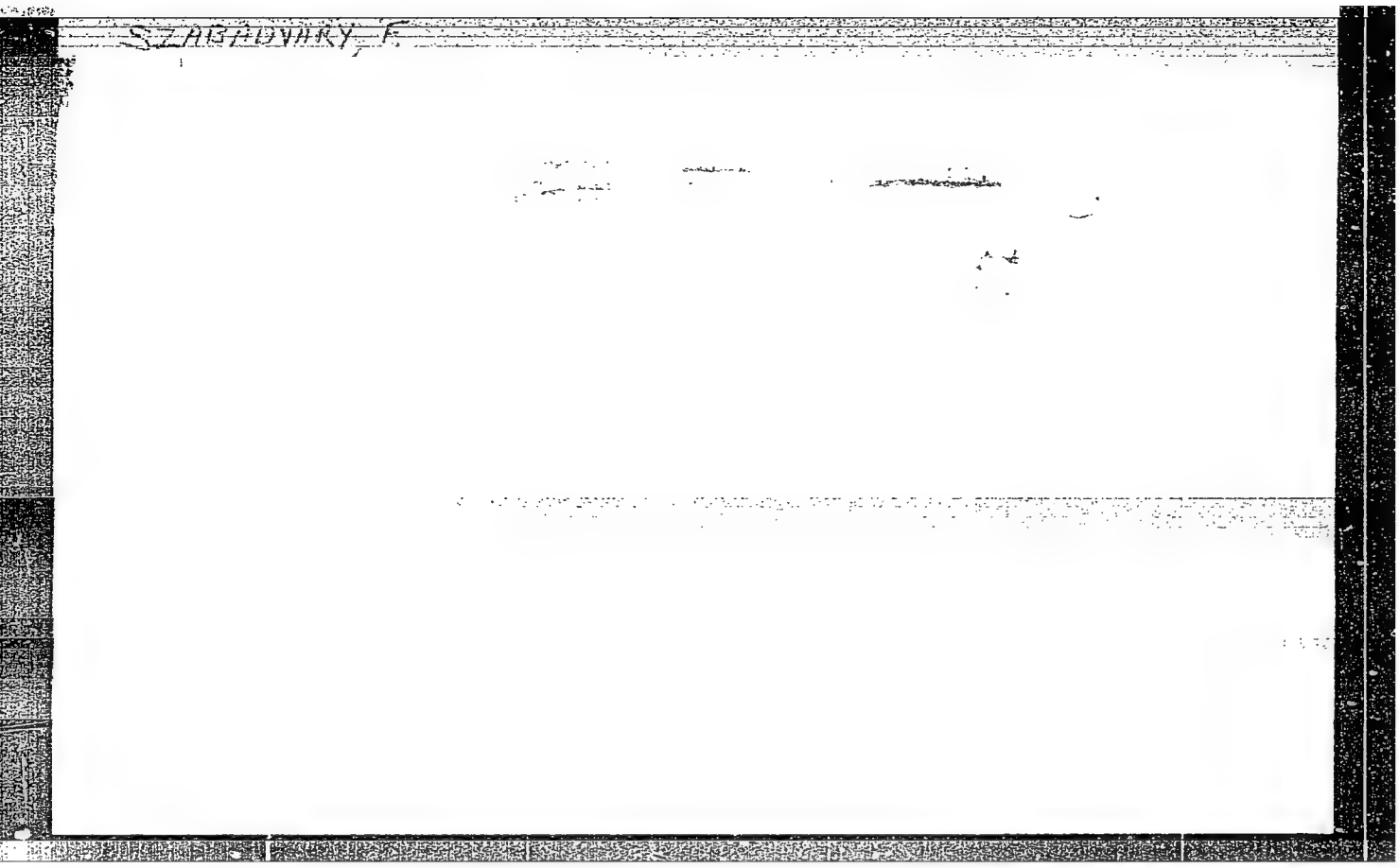
Foly. 1957, 63 (6-7), 153-15[illegible] [illegible] blue B as an indicator, in the pH range [illegible] 0·5 to 12 μg per ml of V^V and 0·2 to 4 μg per ml of Cr (as chromate) can be determined photometrically. The oxidation of V and Cr to the required valency states is described. Iron, Cr and V can be determined simultaneously by the same method. The theory of these determinations and the effect of interfering ions are discussed. A. G. Peto

SZABADVARY, F.

3476. Variamine blue as a colorimetric reagent. I. Erdey and F. Szabadváry (Inst. für Allgemeine Chemie, Tech. Univ., Budapest) *Z. anal. Chem.*, 1957, **155** (2) 90–96.—Variamine blue can be used for the colorimetric determination of many ions whose standard potential lies above that of the reagent, *e.g.* Fe^{3+}, Mn^{3+}, V^{5+}, Ag^{+}, IO_3^-, and I^-. Oxidation equivalents of different ions give the same extinction reading so that one calibration curve suffices. An aq. soln. of the reagent (0·5%) (2 to 6 ml) is added to the test soln. (0·5 to 20 mg-equiv.) in water or alcohol. The extinction is measured after 5 min with a Pulfrich S57 filter (570 mμ). The mechanism of formation of the blue compound, the effect of changes of conditions, and interference [illegible] procedure is described for the estimation of [illegible] and V^{5+} in the presence of each other. G. B. Kolb



Szabadvári

Distr: 4E2c

24. A photometric method of determining vanadium and chromium with Variamine Blue. (In German)
L. Erdey, F. Szabadvári. *Acta Chimica Academiae Scientiarum Hungaricae*. Vol. 13, 1958, No. 3—4, pp. 335—345, 2 figs., 7 tabs.

Though several methods are known for the colorimetric determination of vanadium, they have the common fault that the specific extinction is small. Considerably better results can be obtained with Variamine Blue. Vanadium(V) may be reliably determined within the concentration range of 0.5—12 μg/ml whereas chromium in that of 0.2—4 μg/ml in the presence of each other in solutions of *p*H 1—4. Potassium permanganate is used for oxidizing vanadium and potassium persulphate for chromium, the excess of these reagents is removed before adding the Variamine Blue. In addition a simple colorimetric procedure is given for the determination of iron, vanadium and chromium in the presence of one another by means of Variamine Blue.

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SZABADVARY, FERENC

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Oxidation products of 4-amino-4'-methoxydiphenylamine. Éva Bányai, László Erdey, and Ferenc Szabadváry (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 20, 307–20 (1959)(in German).—The polarographic waves and the absorption max. of 4-amino-4'-methoxydiphenylamine (I), of its oxidn. products, and of *N*-(*p*-anisyl)-*p*-benzoquinone diimine (II) proved that II formed in the 2-electronic oxidn. of I. By varying the pH value of the soln., II suffered a change of color, due to the proton affinity of the imino group. The degree of proton affinity of the imino group was established by an optical method and on the basis of the break points of the oxidn.-redn. potential: pH curves. The electrode potential of the oxidn.-redn. system proved to be pH dependent. In a slightly acidic medium, oxidn. took place through a semiquinone intermediate (III), as detd. by using the index potentials. In the oxidn.-redn. potential measurements, the oxidn. agents were: 0.01*N* Br–H_2O (in acidic soln.) or 0.01*N* K ferricyanide (in alk. soln.), resp. During the potentiometric oxidn. of I with Br–H_2O at pH 1–6, I gave at first a blue color. By adding Br–H_2O in an amt. corresponding to 2 electrons a violet color arose; and in the presence of strong oxidizing agents (Br–H_2O and Cl–H_2O in great excess), the soln. became red. Over pH 8 the oxidized soln. was continuously yellow. At pH 1.5–5.5, the 2-electronic oxidn. went through the intermediate III, the stability of which was assured by mesomeric structures. In alk. soln. the oxidn. was direct. At pH 3, a protonated form of II (IV) presented an absorption max. at 580 mμ. The pH region 3–4 was the most favorable for IV (25%). The 2-electronic oxidn. product of I was violet in acidic soln. (absorption max. at 540 mμ), red close to pH 7 (max. at 460 and 540 mμ), and yellow in alk. soln. (max. at 460 mμ); consequently the red color was an mixed one. By polarographic and optical methods, this oxidn. product proved to be II. The color change was explained as follows: In alk. soln., II exists as a yellow base; in acidic soln., however, by taking up a proton, II can exist in the two violet mesomeric forms of IV. The overoxidized product arising from the action of Cl–H_2O contained 3.1% N, no Br; and, probably, it was decompd. Below pH 1, the violet IV became colorless by decompn. into *N*-(*p*-anisyl)-*p*-benzoquinone imine and NH_3. In weakly acidic medium I took up only one proton, probably on the primary amino group. Over the pH range 1–6, therefore, both the oxidized and the reduced forms of I may exist as univalent cations.

E. Kasztreiner

SZABADVARY, Ferenc (Budapest)

"Determination of phlogiston dissolved in water." Kem tud kozl MTA 16 no.1:41-46 '61.

1. Budapesti Muszaki Egyetem, Altalanos Kemiai Tanszek.

(Chemistry—Phlogiston)

SZABADVARY, Ferenc

The first chemical analysis of the Buda mineral waters.
Magy kem lap 17 no.5:217-220 My '62.

1. Budapesti Muszaki Egyetem Altalanos Kemiai Tanszeke.

CHARLOT, G.; SZABADVARY, Ferenc[translator]

Some examples for the role of reactions occurring in a solution in the further development of chemical analysis. Kem tud kozl MTA 16 no.3: 247-254 '61.

DUVAL, Cl.; SZABADVARY, Ferenc[translator]

Thermogravimetric and infrared spectrophotometric investigation of solid-phase reactions. Kem tud kozl MTA 16 no.3:255-264 '61.

1. Ecole Nationale Superieure de Chimie, Paris.

SZABADVARY, Ferenc

Beginnings of chemical industries. Elet tud 16 no.16:483-486 16 Ap '61.

SZABADVARY, Ferenc

What is behind the tabulation of Mendeleev. Elet tud 16 no.53:1685-1687 31 D '61.

BECK, Mihaly; BITE, Pal; BRUCKNER, Gyozo; CSENTES, Jozsef; CSUROS, Zoltan; DEAK, Gyula; ERDEY-GRUZ, Tibor; ERDEY, Laszlo; FABIAN, Pal; FINALY, Istvan; FODOR, Gabor; FODORNE CSANYI, Piroska; GYORBIRO, Karoly; INZELT, Istvan; KUCSMAN, Arpad; NEUMANN, Erno; PUNGOR, Erno; SCHNEER, Anna; SCHULEK, Elemer; SZABADVARY, Ferenc

Rules for the Hungarian chemical nomenclature and orthography. Kem tud kozl MTA 17 no.1/4:1-292 '62.

1. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Bruckner, Csuros, Laszlo Erdey, G.Fodor, and Schulek). 2. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkesztoje (for Erdey-Gruz). 3. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" technikai szerkesztoje (for Finaly). 4. Muvelodesugyi Miniszterium (for Csentes). 5. Magyar Tudomanyos Akademia Helyesitasi Bizottsage (for Fabian). 6. Nehezipari Miniszterium (for Neumann).

HAISSINSKY, M.; SZABADVARY, Ferenc [translator]

Comparison of the chemistry of cis and trans-uranides with that of lanthanides and of transition elements. Kem tud kozl 18 no.3:395-411 '62.

1. Faculte de Sciences, Laboratoire Curie, Paris (for Haissinsky).

SZABADVARY, F.

"Lexicon of chemical-pharmaceutical symbols" by Wolfgang Schneider. Acta chimica Hung 32 no.1:129 '62.

SZABADVARY, F. (Budapest, XI., Gellert ter 4)

Founding of the Selmec (Schemnitz) Mining Academy and its significance in teaching chemistry all over the world. Periodica polytechn chem 7 no.2:127-133 '63.

1. Lehrstuhl fur Allgemeine Chemie, Technische Universitat, Budapest.

SZABADVARY, Ferenc

Paul Szily a forgotten Hungarian scientist. Orv.hetil. 105 no.7: 328-329 16 F '64.

1. Budapesti Müszaki Egyetem, Altalanos Kemiai Tanszek.

[illegible], I., [illegible] E., [illegible], A.

Relationship between quick variations in the geomagnetic field and telluric currents. p. 544. (GANYASZATI LAPOK, Budapest, Hungary), Vol. 9, No. 10, Oct. 1954.

SO: Monthly list of East European Accessions, (EEAI), LC, Vol. 4, No. 5, May 1955. Uncl.

SZABADVARY, Laszlo; SZABO, Margit

Geoelectric bauxite prospecting measurements in the Bakony Mountains. Geofiz kozl 13 no.3:263-272 '64.

SZABADVARY, Laszlo

Geoelectric soil research on the basis of test borings. Geofiz.kozl 3 no.1/11:121-141 '54.

SZABADVARY-L.

57. Correlations between the rapid variations in the geomagnetic field and the telluric currents — E. Annau, A. Erkel, L. Szabadváry. (*Időjárási Lapok* — Vol. 9 (87), 1956, No. 10; pp. 544—549, 11 figs.)

The authors have designed a magnetometer with a sensibility of 10^{-5} γ, with which rapid magnetic variations have been measured, and simultaneously the variations of the telluric currents have also been recorded. The measuring circuit is a circular conductor of 400 m dia, consisting of two turns, the dimensions of which can be increased up to a certain limit for increasing the sensibility of the apparatus. The recording device records the N and E components of the telluric currents as well as the voltage induced in the circular conductor on a photoreel. The two components are recorded by two separate galvanometers, a third galvanometer records the induced voltage. For the determination of the voltage variations recorded on the photoreel a calibrating device is required by which the two poles of the galvanometer receive a voltage of 7.82×10^{-4} volt from a 1.5-volt battery through a double potentiometric connection. It is indispensable that the measurements be executed in an undisturbed area; this can be found in the mountains surrounding *Sopron*. The results of the measurements show that between the rapid variations of the magnetic field and the telluric currents there exists a certain relationship which can be utilized in applied geophysics. The higher the voltage induced by telluric currents in a circular conductor arranged in a horizontal plane, the smaller

E. ANYAU

the angle formed by the direction of the inclination of the base rock and the horizontal projection of the direction of inclination of the telluric currents, and the greater the angle of inclination of the base rock. The reverse is true for a vertical circular conductor. For the combined application of both circular conductors, a procedure indicating the depth, the strike line and the angle of inclination of the base rock can be elaborated. On the basis of these relations it becomes possible to employ several methods of geophysical research.

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SZABADVARY, Laszlo

Geoelectrical exploration experiences with the location of water wells in Mongolia. Geofiz kozl 9 no.3/4:135-164 '61.

(Mongolia--Water) (Geology)

HOBOT, Jozsef; ERKEL, Andras; SZABADVARY, Laszlo

Complex geoelectric measurements for basin exploration in South Dunantul. Geofiz kozl 13 no.3:273-288 '64.

ERKEL, Andras; KIRALY, Erno; SZABADVARY, Laszlo

Instrument series of GE type geoelectric resistance meters. Geofiz kozl 13 no.1:71-82 '64.

SZABADY, Egon (Budapest)

Tasks of the Demographic Committee, Hungarian Academy of Sciences. (EEAI 10:6)
Magy tud 68 no.3:175-180 Mr '61.

1. Foosztalyvezeto, Kozponti Statisztikai Hivatal, Budapest. (Hungarian Academy of Sciences) (Demography)

SZABADY, Egon, Dr.

The session of the International Union for the Scientific Study of Populations. Stat szemle 40 no.1:79-80 Ja '62.

SZABADY, Egon

Demographic Symposium. Magy tud 70 no.2:121-123 F '63.

1. Kozponti Statisztikai Hivatal foosztalyvezetoje.

SZABADY, Egon

Delegation of the Hungarian Research Group on Demography in Stockholm. Magy tud 70 no.10:716-718 O '63.

1. Kozponti Statisztikai Hivatal foosztalyvezetoje.

CSIKOS, Bela; FUTO, Istvan; EROS, Jozsef; SZABADY, Jeno; EISLER, Janos, Dr.; WALLENSTEIN, Mihaly; REMBECZKY, Laszlo; BALINT, Gabor; ASZTALOS, Peter; BERENYI, Laszlo, okl.gepeszmernok; HORCHER, Frigyes

Remarks on the article "The most important problems of technical development and network electrical installations and tasks for the manufacturing industry related to this." Villamossag 9 no.1/3:17-23 Ja-Mr '61.

1. Az Eromu Troszt villamos osztalyanak vezetoke (for Csikos). 2. A Nehezipari Miniszterium Villamosenergiaipari Igazgatisaganak Szakosztalyvezetoje (for Futo). 3. VERTESZ Villamos Eromu Tervezo es Szerelo Vallalat (for Eros). 4. Klement Gottwald Villamossagi Gyar (for Szabady, Wallenstein, Rembeczky, Balint, Asztalos, Horcher). 5. Budapesti Muszaki Egyetem (for Eisler).

FARKAS, Bela; HOLCZHAUSER, Albert; FUREDI, Pal; SZEPESI, Endre, Dr.; SZABADY, Jeno; SZEPESSY, Sandor; HALASZ, Antal; BALLAI, Laszlo; SZEKELY, Istvan; KOHUT, Matyas

Remarks on the article "Problems of technical development for the heavy industry on the basis of the requirements of industrial branches which use its products." Villamossag 9 no.1/3:53-61 Ja-Mr '61.

1. A Klement Gottwald Villamossagi Gyar fomernoke (for Farkas). 2. A TRANSZVILL Transzformator es Villamoskeszulekgyar fomernoke (for Holczhauser). 3. VERTESZ Villamoseromu Tervezo es Szerelo Vallalat (for Furedi). 4. Hoenergiagazdasagi es Tervezo Vallalat (for Szepesi). 5. Klement Gottwald Villamossagi Gyar (for Szabady and Szekely). 6. Csepeli Transzformatorgyar (for Halasz). 7. Ganz Kapcsolok es Keszulekek Gyara (for Kohut).

SZABADY, Jeno, okleveles gepeszmernok

Modern heavy-current insulators. Technika 6 no.3:6-7 Mr '62.

SZABADY, Karoly

Tasks of the mechanization of the construction industry. Ujit lap 14 no.19:10-11 10 O '62.

SZABAN, J.

"Tasks of Light Industry in Standardization," P. 297. (WIADOMOSCI, Vol. 22, No. 6, June 1954. Warszawa, Poland)

SO; Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

[illegible], J.

Questions of insulation of electric machines. p. 3., ([illegible], Budapest, Hungary), Vol. 2, No. 1/2, Jan./Feb. 1954.

SO: Monthly List of East European Accessions, (LCAI), LC, Vol. 4, No. 5, May 1955.

SZABADY, Jeno

The Klement Gottwald Electrical Works are 80 years old.
Elektrotechnika 52 no.3:127-133 '59.

1. A Klement Gottwald Villamossagi Gyar fomernoke.

SZABLA, Jan

The RH13 power loader. Przegl kolej mechan 15 no.1:30-31 Ja '63.

1. Zaklady Naprawy Taboru Kolejowego, Wroclaw.

SZABE, Istvan; SOMFAI, Karoly

Up-to-date methods for treating hardened materials.
Ujit lap 14 no.9:58-60 10 My '62.

SZABLEWSKA, Anna

Difficulties in the adaptation of children in an anti-tuberculosis sanatorium and their causes. Pediat. pol. 38 no.10:889-895 O '63.

1. Z Dziecicego Osrodka Sanatoryjno-Prewentoryjnego w Rabce Dyrektor: dr med. J. Rudnik.
(HOSPITALIZATION) (TUBERCULOSIS IN CHILDHOOD)
(ADAPTATION, PSYCHOLOGICAL)

BASINSKI, Antoni, SZYMANSKI, Wojciech, SZABLEWSKI, Lech

Solubility of thallium ferrocyanide in water and in some organic solvents as determined by the tracer method. Rocz chemii 36 no.7/8:1255-1257 '62.

1. Katedra Chemii Fizycznej, Uniwersytet im. M.Kopernika, Torun.

SZABLEWSKI, W

1898. Szablewski, W., Turbulent flow in divergent channels (in German). *Ing.-Arch.* 22:4, 268–281, 1954.

Using Prandtl mixing-length assumption to relate turbulent shear stress to mean velocity, author analyzes flow in a two-dimensional channel of small divergence (less than 5°). As a first approximation, the velocity gradient terms in the boundary-layer equations are neglected and velocity distributions are derived for regions close to and far from the wall. These are variations of the well-known logarithmic and wall laws. Comparison is made of the derived laws to the results of Nikuradse (*VDI-Forschungsheft* 361, 1929). Trend of curves is in agreement, but numerical results are not. A second approximation is obtained by combining the mixing-length assumption with a modified momentum equation. The resulting integral equation is linearized to obtain an explicit solution. Good agreement is found between the second approximation and experimental results.

In spite of verification of the theoretical laws by the experiments, reviewer does not think paper makes a substantial contribution to boundary-layer theory. Mixing-length distribution is arbitrary and has no fundamental importance. Recent advances in the analysis of boundary layers under pressure gradient should eliminate the need for analyses such as are presented in this paper. W. D. Baines, Canada

SZABLEWSKI, W.

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2608. Szablewski, W., Velocity distribution close to the wall in boundary-layer flow with pressure increase (in German), *Ing.-Arch.* 23, 4, 295-306, 1955.

The mean equations of motion for turbulent flow near a wall in the presence of a pressure gradient have been integrated to find the mean velocity distribution (law of the wall) using the Prandtl mixing-length approximation for the turbulent shear stress. The constants in the mean velocity formula are assumed to be equal to universal constants given by the empirical constants in the zero pressure gradient case. Comparison with results of Nikuradse's experiment for plane diffusers shows fair agreement, including the diffuser angle for separation, which was found by extrapolating the wall shear stress to zero. Comparison with more recent experimental results is not given.

G. M. Lilley, England.